Frequently Asked Questions

Q: Are natural pesticides less toxic to humans than synthetic pesticides?
A: The source of a chemical is not related to its toxicity. For example, the natural insecticide rotenone is more toxic than the synthetic insecticide permethrin. Use the signal word on the label to determine a pesticide’s relative toxicity.

Q: I’ve heard that I can control insects by mixing dishwashing soap, tobacco juice, and antiseptic mouthwash. Is this effective?
A: Believe it or not, home remedies such as this present more risks than pesticide products. The remedy is just a pesticide that has not gone through the rigorous, mandatory safety testing that pesticide products have. The described remedy kills insects because tobacco juice contains an insecticide, one that is known to be harmful to humans: nicotine.

Q: How long should I wait after using a home remedy to harvest and eat vegetables? Will it harm some plants that I use it on? Will it make birds sick? What should I do if my child swallows some of it?
A: A pesticide label answers these questions about a pesticide product; there are no labels on home remedies.

#11 Choosing a Pesticide

How to Select a Pesticide

Home PEST seeks to provide homeowners with the knowledge they need to make informed decisions about pesticides.

This publication is available from your county Cooperative Extension office.

The Home PEST project was developed by the University of Wisconsin-Extension Pesticide Applicator Training (PAT) program. Any reference to pesticide products are for your convenience and are not an endorsement or criticism of one product over other similar products.

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An EEO/Affirmative Action employer, the University of Wisconsin-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements.
You've decided you need a pesticide to manage a pest. When you go to your local hardware store, you are overwhelmed by the variety of brand names, liquids, granules, dusts, container sizes and types, associated application methods, and prices. So...

...Which product should you buy?

Although a lot goes into that decision, the most important pieces of information are:

**The positive identification of the pest.** Each pesticide is designed to control certain pests. Thus, a pesticide that is effective in controlling one type of household ant may not control another type. Refer to Home PEST brochure #2, “Pesticide Information Sources,” for information on where to get a pest identified.

**The pesticide label.** See Home PEST brochure #5, “Reading Pesticide Labels,” to find out what kinds of information you can find on a label.

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**STEP 1:**

_Do NOT buy a product unless you answer “YES” to ALL of these questions:

- Is the target pest listed on the label?
- Is the site (e.g., lawn, indoors, cat) listed on the label? People have accidentally poisoned their cats by using a flea shampoo that is labeled for use only on dogs.
- Can the pesticide be applied when you think you need it? Pesticides cannot be applied to edible plants within a certain number of days before harvest, as specified on the label.
- Will the pesticide control the particular life stage of the pest? Some herbicides prevent weed seeds from germinating, while others must be applied to growing weeds.
- Do you have, or are you willing to buy, the necessary equipment? This includes application equipment as well as protective clothing (e.g., rubber gloves) listed on the label.
- Is the pesticide product practical to use? A ready-to-use pump bottle of herbicide is useful for spraying weeds in sidewalk cracks, but not for spraying a large area.
- Did you read the entire pesticide label?

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**STEP 2:**

_To choose between products that pass Step 1, check which product:

- Works better? Ask your county Extension agent or someone who is familiar with the products.
- Works for the necessary length of time? Long-term activity helps keep ants out of the house, but is not needed in hornet sprays.
- Is less toxic to people? The signal word on the label indicates the pesticide’s relative toxicity (based on oral, inhalation, and skin toxicity):

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Relative Toxicity</th>
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<tbody>
<tr>
<td>Danger</td>
<td>Highly Toxic</td>
</tr>
<tr>
<td>Warning</td>
<td>Moderately Toxic</td>
</tr>
<tr>
<td>Caution</td>
<td>Slightly Toxic</td>
</tr>
</tbody>
</table>
- Poses a lesser risk of exposure? Tamper-proof bait stations keep children and pets from contacting rodent poison. Ready-to-use products don’t need mixing.
- Is less likely to harm desirable organisms? The label will warn of risks to birds, nearby plants, or pollinating bees.
- Can be used with other pesticides you want to use? A pet may suffer from overexposure if a flea shampoo and a flea collar contain the same pesticide.
- Can you buy in a reasonable amount? Pesticides are often less expensive per ounce in large vs small containers. However, if you do not use all of the product, you don’t really save money, and you assume the risks of storing and/or disposing of excess pesticide.

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Use a pesticide only as directed by the label; it is illegal and unsafe to do otherwise.